UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P O Box 1450
Alexandria, Virginia 22313-1450
www uspto gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,971	02/05/2004	Joseph Z. Lu	I20 06799US	5188

128 7590 11/28/2008

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER	
LO, SUZANNE	

ART UNIT	PAPER NUMBER
2128	

MAIL DATE	DELIVERY MODE
11/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/772,971	LU, JOSEPH Z.	
	Examiner	Art Unit	
	SUZANNE LO	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,3,5,7-11,13,14,17-19,21,22 and 24-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,3,5,7,9-11,13,14,17-19,21,22 and 24-31* is/are rejected.

7)☒ Claim(s) *8, 32-33* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	6) ☐ Other: _____.

DETAILED ACTION

1. Claims 2-3, 5, 7-11, 13-14, 1719, 21-22, and 24-33 have been presented for examination.

Claim Objections

2. Claims 2-3, 5, and 7-11 are objected to because of the following informalities: The claims are objected to as it appears the method claims are not tied to a specific machine or apparatus and therefore may not be directed to statutory subject matter. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 2-3, 5, 7, 9-10, 13-14, 17-18, 21-22, 24-26, and 28-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Madievski et al. (U.S. Patent Application Publication 2004/0057585 A1) in view of Repucci et al. (U.S. Patent Application Publication 2005/0015205 A1).**

As per claim 7, Madievski is directed to a method, comprising: receiving a projection associated with a first signal and a second signal, the second signal comprising a first portion associated with the first signal and a second portion not associated with the first signal, the projection comprising an upper triangular matrix, the projection at least partially isolating the first portion of the second signal from the second portion of the second signal **([0008]-[0012], [0050])**; identifying model parameters using at least a portion of the projection; and generating and storing a model associated with the model parameters **([0042]-[0043])** the model associating the first signal and the first portion of the second signal **([0043])** wherein identifying the model parameters comprises: identifying one or more pole candidates using one or more first defined areas in the upper triangular matrix **([0044]-[0045])**, the model parameters comprising at least one of the one or more pole candidates **([0046]-[0047])** but fails to explicitly disclose wherein each of the one or more second defined areas represents a matrix centered along one of multiple diagonals of the upper triangular matrix; and wherein identifying the one or more model parameters comprises using one or more defined areas in the upper triangular matrix, wherein each of the one or more defined areas centered along one of multiple diagonals of the upper triangular matrix.

Repucci teaches projecting a matrix by performing canonical QR-decomposition on the matrix with an orthogonal matrix and an upper triangular matrix **([0010], [0073], page 8, [0101])** wherein each of the one or more second defined areas represents a matrix centered along one of multiple diagonals of the upper triangular matrix **([0089])** wherein identifying model parameters comprises using one or more defined areas in the upper triangular matrix, the model parameters comprising at least one of the one or more model candidates **([0084]- [0089])**. Any rectangular matrix (which includes upper and lower triangular matrices), such as the ones disclosed by Repucci, inherently has multiple diagonals that start in lower and upper left corners that travel towards the upper and lower right corners respectively. Additionally, the T_n matrix of [0073] applied as the T' matrix [0090] has the right most column as a defined area within one section of the matrix. The rightmost column of T' is used to solve one of the T_{HD}

parameters of [0090]. Madievski and Repucci are analogous art because they are from the same field of endeavor, modeling and separating mixed signals. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of separating signals of Madievski with the matrix projection method of Repucci in order to minimize error in the modeled signals **(Repucci, page 8, [0101])**.

As per claim 2, the combination of Madievski and Repucci is directed to the method of claim 7, wherein identifying the model parameters <u>further</u> comprises: selecting at least one of the one or more pole candidates and selecting at least one of the one or more model candidates as the model parameters **(Madievski, [0046]-[0047])**.

As per claim 3, the combination of Madievski and Repucci is directed to the method of claim 7, wherein: the upper triangular matrix has a plurality of values along <u>one of</u> the diagonals of the upper triangular matrix each value being greater than or equal to zero **(Repucci, [0010], [0073], page 8, [0101])**.

As per claim 5, the combination of Madievski and Repucci already discloses the method of claim 4, wherein the diagonals divide the upper triangular matrix into upper, lower, left, and right sections; and the one or more <u>first</u> defined areas in the upper triangular matrix are located in the right section of the upper triangular matrix **(Repucci, [0101])**.

As per claim 9, the combination of Madievski and Repucci already discloses the method of claim 7, wherein: identifying the one or more model parameters comprises identifying one or more model parameters for each of <u>multiple first</u> defined areas in the upper triangular matrix **(Repucci, [0089])**.

As per claim 10, the combination of Madievski and Repucci already discloses the method of claim 9 wherein: the one or more model parameters associated with different <u>first</u> defined areas in the upper triangular matrix are different **(Repucci, [0085]-[0086])**; and identifying the model parameters

further comprises selecting the one or more model parameters associated with a specific one of the first defined areas in the upper triangular matrix **(Repucci, [0087]-[0089])**.

As per claim 28, the combination of Madievski and Repucci is directed to the method of claim 7, wherein the projection at least partially isolates the first portion of the second signal from the second portion of the second signal in an orthogonal space **(Repucci, [0010], [0073], page 8, [0101])**.

As per claim 17, Madievski is directed to an apparatus, comprising: at least one input receiving a first signal and a second signal, the second signal comprising a first portion associated with the first signal and a second portion not associated with the first signal **([0008]-[0012])**; and at least one processor generating a projection associated with the first and second signals and identifying model parameters using at least a portion of the projection, the projection comprising an upper triangular matrix, the projection at least partially isolating the first portion of the second signal from the second portion of the second signal **([0043])** and generating and storing a model associated with the one or more model parameters, the model associating the first signal and the first portion of the second signal **([0042]-[0043])** wherein the at least one processor identifies the model parameters by: identifying one or more pole candidates using one or more first defined areas in the upper triangular matrix **([0044]-[0045])**, the model parameters comprising at least one of the one or more pole candidates **([0046]-[0047])** but fails to explicitly disclose wherein each of the one or more second defined areas represents a matrix centered along one of multiple diagonals of the upper triangular matrix; and wherein identifying the one or more model parameters comprises using one or more defined areas in the upper triangular matrix, wherein each of the one or more defined areas centered along one of multiple diagonals of the upper triangular matrix.

Repucci teaches projecting a matrix by performing canonical QR-decomposition on the matrix with an orthogonal matrix and an upper triangular matrix **([0010], [0073], page 8, [0101])** wherein each of the one or more second defined areas represents a matrix centered along one of multiple diagonals of the upper triangular matrix **([0089])** wherein identifying model parameters comprises using one or more

defined areas in the upper triangular matrix, the model parameters comprising at least one of the one or more model candidates **([0084]- [0089])**. Any rectangular matrix (which includes upper and lower triangular matrices), such as the ones disclosed by Repucci, inherently has multiple diagonals that start in lower and upper left corners that travel towards the upper and lower right corners respectively. Additionally, the T_n matrix of [0073] applied as the T' matrix [0090] has the right most column as a defined area within one section of the matrix. The rightmost column of T' is used to solve one of the T_{HD} parameters of [0090]. Madievski and Repucci are analogous art because they are from the same field of endeavor, modeling and separating mixed signals. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of separating signals of Madievski with the matrix projection method of Repucci in order to minimize error in the modeled signals **(Repucci, page 8, [0101])**.

As per claim 13, the combination of Madievski and Repucci is directed to the apparatus of claim 17, wherein the at least one processor identifies the model parameters by: selecting at least one of the one or more pole candidates and selecting at least one of the one or more model candidates as the model parameters **(Madievski, [0046]-[0047])**.

As per claim 14, the combination of Madievski and Repucci is directed to the apparatus of claim 17, wherein: the upper triangular matrix has a plurality of values along one of the diagonals of the upper triangular matrix, each value being greater than or equal to zero **(Repucci, [0010], [0073], page 8, [0101])**.

As per claim 18, the combination of Madievski and Repucci already disclose the apparatus of claim 17 wherein: the at least one processor identifies the model parameters by identifying one or more model parameters for each of multiple first defined areas in the upper triangular matrix **(Repucci, [0085]-[0086])**.

As per claim 24, Madievski is directed to a computer program embodied on a computer readable medium, the computer program comprising: computer readable program code that receives a projection associated with a first signal and a second signal, the second signal comprising a first portion associated with the first signal and a second portion associated with at least one disturbance, the projection comprising an upper triangular matrix, the projection at least partially isolating the first portion of the second signal from the second portion of the second signal **([0008]-[0012], [0050])**; computer readable program code that identifies model using at least a portion of the projection **([0043])**; and computer readable program code that generates and stores a model associated with the one or more model parameters, the model associating the first signal and the first portion of the second signal **([0042]-[0043])** wherein the computer readable program code that identifies the model parameters comprises: computer readable program code that identifies one or more pole candidates using one or more first defined areas in the upper triangular matrix **([0044]-[0045])**, the model parameters comprising at least one of the one or more pole candidates **([0046]-[0047])** but fails to explicitly disclose wherein computer readable program code that identifies the one or more model parameters comprises computer code that uses one or more defined areas in the upper triangular matrix, the model parameters comprising at least one of the one or more model candidates and wherein each of the one or more second defined areas represents a matrix centered alongone of multiple diagonals of the upper triangular matrix.

Repucci teaches projecting a matrix by performing canonical QR-decomposition on the matrix with an orthogonal matrix and an upper triangular matrix **([0010], [0073], page 8, [0101])** wherein each of the one or more second defined areas represents a matrix centered along one of multiple diagonals of the upper triangular matrix **([0089])** wherein identifying model parameters comprises using one or more defined areas in the upper triangular matrix, the model parameters comprising at least one of the one or more model candidates **([0084]- [0089])**. Any rectangular matrix (which includes upper and lower triangular matrices), such as the ones disclosed by Repucci, inherently has multiple diagonals that start in

lower and upper left corners that travel towards the upper and lower right corners respectively. Additionally, the T_n matrix of [0073] applied as the T' matrix [0090] has the right most column as a defined area within one section of the matrix. The rightmost column of T' is used to solve one of the T_{HD} parameters of [0090]. Madievski and Repucci are analogous art because they are from the same field of endeavor, modeling and separating mixed signals. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of separating signals of Madievski with the matrix projection method of Repucci in order to minimize error in the modeled signals **(Repucci, page 8, [0101])**.

As per claim 21, the combination of Madievski and Repucci is directed to the computer program of claim 24, wherein the computer readable program code that identifies the model parameters comprises: computer readable program code that selects at least one of the one or more pole candidates and that selects at least one of the one or more model candidates as the model parameters **(Madievski, [0046]-[0047])**.

As per claim 22, the combination of Madievski and Repucci already discloses the computer program of claim 24, wherein: the upper triangular matrix has a plurality of values along one of the diagonals of the upper triangular matrix each value being greater than or equal to zero **(Repucci, [0010], [0073], page 8, [0101])**.

As per claim 25, the combination of Madievski and Repucci already discloses the computer program of claim 24, wherein: the computer readable program code that identifies the one or more model parameters comprises computer readable program code that identifies one or more model parameters for each of multiple first defined areas in the upper triangular matrix **(Repucci, [0089])**.

As per claim 26, the combination of Madievski and Repucci already discloses the computer program of claim 25 wherein: the one or more model parameters associated with different first defined areas in the upper triangular matrix are different **(Repucci, [0085]-[0086])**; and the computer readable

program code that identifies the one or more model parameters further comprises computer readable program code that selects the one or more model parameters associated with a specific one of the first defined areas in the upper triangular matrix **(Repucci, [0087]-[0089])**.

As per claim 28, the combination of Madievski and Repucci is directed to the method of claim 7, wherein the projection at least partially isolates the first portion of the second signal from the second portion of the second signal in an orthogonal space **(Repucci, [0010], [0073], page 8, [0101])**.

As per claim 29, the combination of Madievski and Repucci is directed to the apparatus of claim 17, wherein the at least one processor uses the stored model parameters associated with the stored model to de-noise the second signal **(Madievski, [0047]-[0048], [0055])**.

As per claim 30, the combination of Madievski and Repucci is directed to the method of claim 7, wherein: a first of the diagonals extends from an upper left corner to a lower right corner of the upper triangular matrix; and a second of the diagonals extends from a lower left corner to an upper right corner of the upper triangular matrix **(Repucci, [0089])**.

4. **Claims 11, 19, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Madievski et al. (U.S. Patent Application Publication 2004/0057585 A1) in view of Repucci et al. (U.S. Patent Application Publication 2005/0015205 A1) in further view of **Swinnen et al. ("Detection and multichannel SVD-based filtering of trigeminal somatosensory evoked potentials")**.

As per claim 11, Madievski is directed to a method, comprising: receiving a projection associated with a first signal and a second signal, the second signal comprising a first portion associated with the first signal and a second portion not associated with the first signal, the projection comprising an upper triangular matrix, the projection at least partially isolating the first portion of the second signal from the second portion of the second signal **([0008]-[0012], [0050])**; identifying model parameters using at least a portion of the projection; and generating and storing a model associated with the model parameters

([0042]-[0043]) the model associating the first signal and the first portion of the second signal **([0043])** wherein identifying the model parameters comprises: identifying one or more pole candidates using one or more first defined areas in the upper triangular matrix **([0044]-[0045])**, the model parameters comprising at least one of the one or more pole candidates **([0046]-[0047])** but fails to explicitly disclose wherein each of the one or more second defined areas represents a matrix centered along one of multiple diagonals of the upper triangular matrix; and wherein identifying the one or more model parameters comprises using one or more defined areas in the upper triangular matrix, wherein each of the one or more defined areas centered along one of multiple diagonals of the upper triangular matrix.

Repucci teaches projecting a matrix by performing canonical QR-decomposition on the matrix with an orthogonal matrix and an upper triangular matrix **([0010], [0073], page 8, [0101])** wherein each of the one or more second defined areas represents a matrix centered along one of multiple diagonals of the upper triangular matrix **([0089])** wherein identifying model parameters comprises using one or more defined areas in the upper triangular matrix, the model parameters comprising at least one of the one or more model candidates **([0084]- [0089])** when performing canonical QR-decomposition on the matrix to form a second upper triangular matrix, each second upper triangular matrix having an upper right portion denoted R.sub.E3; for each second upper triangular matrix, identifying a value for .parallel.R.sub.E3.parallel..s- ub.2.sup.2 and selecting the one or more model parameters associated with the defined area having the second upper triangular matrix with a smallest value for .parallel.R.sub.E3.parallel..sub.2.sup.2 **([0090],[0096])**. Any rectangular matrix (which includes upper and lower triangular matrices), such as the ones disclosed by Repucci, inherently has multiple diagonals that start in lower and upper left corners that travel towards the upper and lower right corners respectively. Additionally, the T_n matrix of [0073] applied as the T' matrix [0090] has the right most column as a defined area within one section of the matrix. The rightmost column of T' is used to solve one of the T_{HD} parameters of [0090]. Madievski and Repucci are analogous art because they are from the

same field of endeavor, modeling and separating mixed signals. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of separating signals of Madievski with the matrix projection method of Repucci in order to minimize error in the modeled signals **(Repucci, page 8, [0101])**.

However the combination of Madievski and Repucci fails to explicitly disclose wherein the generated matrix comprises a forward column Hankel matrix based on a prediction error, the prediction error associated with the one or more model parameters that are associated with that defined area. Swinnen teaches generated matrix comprises a forward column Hankel matrix based on a prediction error, the prediction error associated with the one or more model parameters that are associated with that defined area **(page 302, 1st column, Step 2).** It would have been obvious at the time of the invention to an ordinary person skilled in the art to combine the matrix manipulation method of Repucci with the Hankel matrix of Swinnen in order to improve the signal to noise ratio and extraction of the characteristic components of the original signal **(Swinnen, page 301, Section 4.2, 1st paragraph)**.

Claim 19 is directed to an apparatus comprising a processor and input performing the method of claim 11 and is therefore rejected over the same prior art combination.

Claim 27 is directed to a computer program embodied on a computer readable medium, the computer program comprising code for performing the method of claim 11 and is therefore rejected over the same prior art combination.

5. **Claim 31** is rejected under 35 U.S.C. 103(a) as being unpatentable over Madievski et al. (U.S. Patent Application Publication 2004/0057585 A1) in view of Repucci et al. (U.S. Patent Application Publication 2005/0015205 A1) **in further view of Bechhoefer et al. (U.S. Patent Application Publication 2003/0004658).**

As per claim 31, the combination of Madievski and Repucci is directed to the method of claim 7 but fails to explicitly disclose further comprising controlling at least a portion of a process using the model. Bechhoefer teaches using a model which has been derived from isolating one signal from multiple signals to control adjustments made to rotating blades **([0011])**. Madievski, Repucci, and Bechhoefer are analogous art because they are all from the same field of endeavor, isolating signals. It would have been obvious to an ordinary person skilled in the art at the time of the invention to combine the method of signal isolation of Madievski and Repucci with the control of a process of Bechhoefer in order to avoid structural damage to helicopters **(Bechhoefer, [0005])**.

Allowable Subject Matter

6. Claims 8, 32-33 are objected to as being dependent upon a rejected base claim, but would be allowable only if rewritten in independent form **including all of the limitations of the base claim** and any intervening claims. The reasons for allowance are held in abeyance until all other outstanding rejections in regards to the instant application are resolved.

Response to Arguments

7. Applicant's arguments filed 08/28/08 have been fully considered but they are not persuasive.

8. The amended claims are not allowable. As stated in the previous office action dated 05/29/08, the claims submitted with the RCE dated 03/04/08 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. As the Applicant has failed to do so, the claims are not allowable.

Contrary to Applicant's arguments that the independent claims are allowable as they stand, in view of the prior art, the independent claims are not allowable. Limitations that must be included to render the claim allowable are "wherein the projection comprises an upper triangular matrix having two

diagonals that divide the upper triangular matrix into four sections, a first of the diagonals starting at an upper left corner of the upper triangular matrix and traveling down and right in the upper triangular matrix, a second of the diagonals starting at a lower left corner of the upper triangular matrix and traveling up and right in the upper triangular matrix" and "the one or more defined areas located in a single one of the sections of the upper triangular matrix".

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The prior art made of record is not relied upon because it is cumulative to the applied rejection. These references include:

1. U.S. Patent No. 6,564, issued to Kadtke et al. on 05/13/06.
2. U.S. Patent Application Publication 2004/0071103A1 published by Henttu on 04/15/04.
3. "Blind signal separation with a projection pursuit index" published by Sarajedini et al. in 1998.
4. "Blind Deconvolution of Dynamical Systems: A State-Space Approach" published by Zhang et al. in March 2000.

5. U.S. Patent No. 6,622,117 B2 issued to Deligne et al. on 09/16/03.
6. U.S. Patent No. 5,980,097 issued to Dagnachew on 11/09/99.
7. U.S. Patent Application Publication 2004/0078412 published by Nakanishi on 04/22/04.
8. U.S. Patent No. 6,907,513 B2 issued to Nakanishi on 06/14/05.
9. U.S. Patent No. 6,757,596 B2 issued to Lin on 06/29/04.
10. U.S. Patent No. 7,003,380 B2 issued to MacMartin et al. on 02/21/06.
11. U.S. Patent No. 7,089,159 B2 issued to Hachiya on 08/08/06.
12. U.S. Patent No. 6,510,354 B1 issued to Lin on 01/21/03.
13. U.S. Patent No. 5,991,525 issued to Shah et al. on 11/23/99.
14. U.S. Patent No. 5,706,402 issued to Bell on 01/06/98.

10. All Claims are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne Lo whose telephone number is (571)272-5876. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571)272-2297. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kamini S Shah/
Supervisory Patent Examiner, Art Unit 2128

/SL/
11/13/08